

**To:** Colaizzi, Jennifer C.[Colaizzi.Jennifer@epa.gov]  
**From:** Harris-Bishop, Rusty  
**Sent:** Tue 8/11/2015 7:32:35 PM  
**Subject:** Fwd: Impacts on Lake Powell

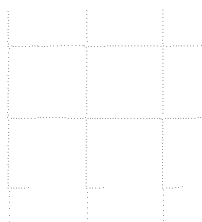
Hey Jennifer, this is what ice put together so far. It hasn't been vetted but it's just volume and math. Working on getting info on what we're doing regarding sampling in the San Juan River.

Rusty

Sent from my iPhone

Begin forwarded message:

**From:** "Harris-Bishop, Rusty" <Harris-Bishop.Rusty@epa.gov>  
**Date:** August 11, 2015 at 12:54:45 PM MDT  
**To:** Enrique Manzanilla <manzanilla.enrique@epa.gov>, "Keener, Bill" <Keener.Bill@epa.gov>, "Zito, Kelly" <ZITO.KELLY@EPA.GOV>, "Blumenfeld, Jared" <BLUMENFELD.JARED@EPA.GOV>, "Allen, HarryL" <Allen.HarryL@epa.gov>, "Nattis, Randy" <Nattis.Randy@epa.gov>, "Wise, Robert" <Wise.Robert@epa.gov>, "Calanog, Steve" <Calanog.Steve@epa.gov>, "Moxley, Bret" <Moxley.Bret@epa.gov>, "Yogi, David" <Yogi.David@epa.gov>, "Harrison, Melissa" <Harrison.Melissa@epa.gov>, "StClair, Christie" <StClair.Christie@epa.gov>, "Faulk, Libby" <Faulk.Libby@epa.gov>  
**Subject:** Impacts on Lake Powell



Hi everyone:

I know we are being asked about potential impacts to Lake Powell so I just, for myself, wanted to do a calculation about water volumes to determine if there would be any type of measureable impact. While this is purely a mathematical calculation, I think it helps with us communicating that users of water at Lake Powell and further downstream are probably safe. If someone could double-check my logic and math, that would be great, but here is my estimate:

Lake Powell water volume, based on July 29 levels: 4.247 trillion gallons of water

(53.59% full, from [www.lakepowell.water-data.com](http://www.lakepowell.water-data.com))

Estimated release from the site: 3 million gallons

IF the released all the mine water directly into Lake Powell, ignoring the more than 315 miles of river from the release to Lake Powell (I used Google maps to VERY roughly measure the length of the river miles), the concentration is 0.00000071.

Miles of river in Navajo: rough estimate at least 215 miles.

Let me know if there are any problems with this “back of the envelope” calculation.

Thanks!

Rusty



**Rusty Harris-Bishop** • Superfund Project Manager • Communications Liaison • US Environmental Protection Agency •

75 Hawthorne Street • San Francisco, CA • 94105 • 415.972.3140 • 415.694.8840 (c)

